

1 45578/DBS/A673

CASING PATCHING TOOL

5 ABSTRACT OF THE DISCLOSURE

10 An apparatus for sealing perforations, holes, cracks or the like in a tube or pipe and particularly in an oil well casing. The apparatus including a delivery tool for delivery of a coiled patch composed of spring-like material to the location of a
15 damaged portion within a pipe. The patch consisting of a flat sheet of spring-like material where the length and width of the patch are comparatively large with respect to the thickness of the patch. The delivery tool comprising a hydraulically activated plunger assembly and barrel. Prior to use, the patch is wound
20 into the form of a coiled cylinder by means of a rolling tool and is loaded into the barrel of the delivery tool. To deploy the patch, hydraulic pressure is applied to the plunger assembly causing the plunger to move downwardly within the barrel and push the patch out of the barrel. Upon deployment, the patch unwinds within the pipe or tube and seals the damaged area against the infiltration or exfiltration of fluids or gasses.

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